

U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office

Species Account BURKE'S GOLDFIELDS





CLASSIFICATION: Endangered

Federal Register Notice 56:61173; December 2, 1991 http://ecos.fws.gov/docs/federal_register/fr1980.pdf (3.6 MB)

STATE LISTING STATUS AND CNPS CODE:

This species was listed as endangered by the California Department of Fish and Game in September 1997. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range).

CRITICAL HABITAT: None designated

RECOVERY PLAN: None

5-YEAR REVIEW: Completed 10/8/2008. No change. http://ecos.fws.gov/docs/five_year_review/doc1992.pdf

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DESCRIPTION:



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Burke's goldfields is a small, slender annual herb in the sunflower family (Asteraceae). It has narrow, opposite leaves. The plant can be easily confused with other goldfields such as Contra Costa goldfields (*L. conjugens*) by people not trained in botany.

Both the ray and disk flowers of L. burke are bright yellow, while the pappus of the species usually consists of one long bristle and several short bristles. In similar members of the genus, the pappus (seed appendage that aids dispersal by acting like a little parachute) usually is absent or consists of two or more lung bristles.

See Hickman (1993) in General Information about California Plants, below, for a detailed description of Burke's goldfields and other goldfields (*Lasthenia*) species.

Flowers bloom from April until June.

VERNAL POOLS:

Vernal pools are a unique kind of wetland ecosystem. Central to their distinctive ecology is their ephemeral nature. Vernal pools fill with water temporarily, typically during the winter and spring, and then disappear until the next rainy season.

In California, where extensive areas of vernal pool habitat developed over a long geological timeframe, unique suites of plants and animals have evolved that are specially adapted to the unusual conditions of vernal pools. Fish and other predators are among species that have been excluded evolutionarily byte annual filling and drying cycles of vernal pools.

The prolonged annual dry phase of the vernal pool ecosystem also has prevented the establishment of plant species typical of more permanent wetland ecosystems.

DISTRIBUTION:

This vernal pool species is known only from southern portions of Lake and Mendocino counties and from northeastern Sonoma County. Historically, 39 populations were known from the Cotati valley, 2 sites in Lake County, and one site in Mendocino County. The occurrence in Mendocino County is most likely extirpated. From north to south in the Cotati Valley, the species ranges from north of the community of Windsor to east of the city of Sebastopol.

Other endangered plants found in the Cotati Valley include Sonoma Sunshine or Baker's Stickyseed (*Blennosperma Bakeri*) and Sebastopol meadowfoam (*Limnanthes vinculans*).

U.S. Geological Survey 7.5 Minute Quads: Santa Rosa (501B) 3812246, Cotati (501C) 3812236, Sebastopol (502A) 3812247, Calistoga (517D) 3812255, Jimtown (518A) 3812267, Healdsburg (518D) 3812257, Lower Lake (533A) 3812285, Clearlake Highlands (533B) 3812286, Middletown (533D) 3812275, Kelseyville (534A) 3812287, The Geysers (534D) 3812277, Ukiah (550B) 3912322.

THREATS:

Primary threats to the species consist of activities that result in the destruction of the plants or hydrologic changes in their vernal pool habitats. Such activities include urbanization, industrial development, agricultural land conversion, off-highway vehicle use, horseback riding, trampling by grazing cattle, and road widening. Damage or destruction of vernal pool habitat happens quickly and easily due to the extremely friable nature of the soil and the dependency of the pool upon an intact *durapan* (impermeable subsurface soil layer).

REFERENCES FOR ADDITIONAL INFORMATION:

General references about California plants

www.fws.gov/sacramento/es/plant spp accts/plant references.htm

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